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# A NEW INSULAR SUBSPECIES OF SPINY POCKET MOUSE (MAMMALIA; RODENTIA)

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Recent work on islands in the northern part of the Gulf of California, Baja California, Mexico, has revealed the presence of two previously unreported populations of Spiny Pocket Mouse, *Perognathus spinatus* Merriam. These populations seem not to differ from one another, but they are recognizably distinct from others on nearby islands and on the peninsula of Baja California.

#### Perognathus spinatus lorenzi new subspecies

Holotype: Adult male, San Diego Natural History Museum no. 19901, collected on South San Lorenzo Island (28° 36' N lat., 112° 51' W long.), Gulf of California, Baja California, Mexico, 22 October 1964, by Richard C. Banks; original number 2366.

Diagnosis: Similar in size to P. s. guardia Burt of Angel de la Guarda Island to the north, but darker in color and with a shorter, shallower skull. Lighter in color and much smaller than P. s. prietae Huey of the nearby mainland of Baja California. Somewhat larger than P. s. evermanni Nelson and Coldman of Mejía Island and brownish rather than gray in overall coloration. Distinguished from all these populations by the extremely dark dorsal tail stripe and by the shorter, shallower skull.

Measurements of holotype in mm: Total length, 169; tail length, 93; hind foot, 20; ear, 8; skull length, 23.9; length of nasals, 9.4; skull width, 12.2; skull depth, 7.7; interorbital width, 6.1; length of maxillary tooth row, 3.5; weight, 13.4 grams; testes  $2 \times 4$  mm.

Range: South San Lorenzo Island and North San Lorenzo Island  $(28^{\circ} 42' \text{ N lat.}, 112^{\circ} 57' \text{ W long.})$ , Culf of California, Baja California, Mexico. Only three specimens are available from North San Lorenzo, but these appear to differ in no way from the large series from the other island.

Comments: The four populations of P. spinatus considered here may be characterized briefly as follows. P. s. evermanni is a small, short-

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TABLE 1. Measurements (in mm) of four subspecies of *Perognathus* spinatus. Sexes are combined except for external measurements of *P. s.* prietae, the only instance where sexual dimorphism is significant. (M = mean; R = range; N = number in sample)

		evermanni	guardia	lorenzi	prietae
	М	152.5	160.5	160.4	∂ 186.6 ♀ 174.9
Total length	R	142-160	155–175	152-169	<ul> <li>∂ 179–195</li> <li>♀ 165–186</li> </ul>
	N	23	11	18	8 10 8 8
	М	77.7	85.5	88.5	3 108.0 ♀ 99.6
Tail length	R	68-86	79–95	80–98	<pre>\$ 105−112 \$ 91−108</pre>
	N	23	11	18	8 10 ♀ 8
	М	23.8	24.3	22.8	24.6
Skull length	R	23.0 - 24.6	23.0 - 25.7	21.5 - 24.0	23.8-25.8
	Ν	26	12	19	22
	М	11.7	12.0	11.6	12.6
Skull width	R	11.3-12.0	11.4 - 12.5	10.8 - 12.2	12.1-13.1
	Ν	27	12	20	22
	М	8.0	8.0	7.7	8.3
Skull depth	R	7.7-8.4	7.6-8.2	7.4-7.9	7.7-8.6
	Ν	27	12	21	22
	М	9.1	9.5	8.8	9.3
Length of nasals	R	8.7-9.7	9.0-10.5	8.1-9.7	8.5-10.3
	Ν	25	11	19	22

tailed, dark gray mouse; *P. s. prietae* is large, with a long tail and a large skull, and is dark brown in color. *P. s. guardia* is intermediate in most features of size, but is the palest of the populations, and is brown rather than gray. The newly described *P. s. lorenzi* is similar to guardia in external measurements of size (total length and tail length), and in color is between the pale guardia and dark prietae. The dark dorsal tail stripe of *lorenzi* is particularly distinctive.

The skull of *P. s. prietae* is larger than the others in all dimensions, approached most closely by *P. s. guardia*. The skull is shortest (in greatest length of skull), narrowest (in width of braincase) and shalowest (in depth of skull and auditory bullae) in *P. s. lorenzi*; *P. s. evermani* is intermediate in length of the skull, but very close to

*lorenzi* in skull width and to guardia in skull depth. Much, but not all, of the variation in skull length is a correlate of variation in the length of the nasals; these bones are longest in guardia and shortest in *lorenzi*. The measurements from which the above characterizations were drawn are summarized in Table 1. The San Lorenzo Island population is, in the features of length and width of the skull and length of nasals, the smallest of all of the Gulf of California insular populations (*cf.* Burt, 1932:170). There seem to be no meaningful differences between *lorenzi* and the nearby populations in length of the maxillary tooth row or in the interorbital width, which were also measured.

The two San Lorenzo Islands are at the southern end of a submerged ridge trending generally southeastward from Mejía and Angel de la Guarda islands, roughly parallel to the east coast of the peninsula of Baja California. This chain of islands is separated from the peninsula by the extremely deep Salsipuedes Basin. No pocket mice have been taken from the other, smaller islands in the chain (Partida, Raza, and Salsipuedes), although what may have been pocket mouse sign was noted on Partida Island.

Specimens examined: Twenty-seven P. s. evermanni from Mejía Island (25, San Diego Natural History Museum; 2, Dirección General de la Fauna Silvestre, Mexico); 13 P. s. guardia (12, SDNHM; 1, U.S. National Museum); 21 P. s. lorenzi from South San Lorenzo Island (20, SDNHM; 1, DGFS) and 3 from North San Lorenzo Island (2, SDNHM; 1, DGFS); 22 P. s. prietae from 25 mi. N Punta Prieta and Barril, Baja California (SDNHM).

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*Dedication*: This paper is dedicated to the memory of E. Yale Dawson, former Director of the San Diego Natural History Museum and a companion in the field work from which this paper results.

#### LITERATURE CITED

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